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Applicant: Luis J. Rodriguez
Title: Self Sealing Forms
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AFFIDAVIT 1

Pursuant to 37 CDR 1.132, this Affidavit and its attachments are respectfully submitted as objective evidence that:

I. there has been a long felt need in the art and others have failed,

II. the invention produces unexpected results,

III. the invention produces synergistic effects,

IV. one cited reference is inoperative, and hence nonuseful.

To that end, a recapitulation of the unexpected results and advantages provided by the claimed invention with respect to the state of the art—**a crowded art**—is first submitted, as follows:

1) a form that can wrap itself, eliminating the need for an envelope is possible.

2) a practical and economical production of self contained forms, such as letters, accounting and legal correspondence, advertising messages, etc. for the personalized printing of both, a private message and the address and return information as well as any other information, with one single printing command, and one single trip of said form across the printer is possible.

3) as a result, self wrapping messages can be electronically produced and recorded.

4) while windows are possible to aid in the exposure of the addressing information in some embodiments, they are not indispensable, as alternate better ways of readily addressing the form are disclosed.

5) moistening of a dry adhesive coating is not necessary.

6) production, mounting, un-mounting and removal of a release liner to the form is not necessary.

7) use of heat to activate adhesive is not necessary.

8) the use of a machine to exert pressure to adhesive coatings against another surface is not necessary.

9) the use of a gluing machine is not necessary.

10) the use of multiple overlaying sheets is not necessary.

11) the use of glue to keep multiple overlaying sheets in place is not necessary.

12) continuous and non-continuous forms are possible to suit continuos and non continuos feeding systems, making possible the use of this invention with virtually any industrial, commercial and personal printers, and the handling of long runs, short runs or individual printing assignments is possible.

13) a form that can offer absolute privacy and confidentiality, by requiring the absolute and deliberate opening of it to expose its message is possible.

14) printing on both sides of a form quasi-simultaneously is possible (**See Figs. 12C, 24B**)

15) a form that can provide a built-in reply portion, (i.e. a "sub-form") having all the attributes and advantages described above is possible. (**See Figs. 24's and 25's**)

16) the amount of materials required is substantially less. (**See Attachment 4**), which translates in substantial costs reduction.

17) as a result, the weight of the product is lighter than the combination of a letter and an envelope, which translates in postage savings, especially significant in massive mailings.

I. There has been a long felt need in the art —a crowded art— and others have failed to design a practical self sealing form that is further suitable for feeding into personal, commercial, and industrial printers and other machines

The following products/patents are posterior to references cited in Office Action rejections, i.e.:

- Schieman, against claim 7, 11 and 12 under §102(b);
- Fisher combined with Schieman against claims 7-9, 11, 12, 14 and 15 under §103(a)
- Tissot Combined with Schieman against amended claims 1, 7, 11 and 17 submitted by fax on 03/26/02 under §103(a)

which constitute objective evidence that the art has recognized the need to provide for an efficient and practical self sealing form, that does not need an envelope; but has failed to offer a solution that further provides all the advantages of the present invention.

a) U.S. Patent 4,668,211 to Lubotta et al, discloses a 'returnable self mailer' which addresses "the

opened possibilities in the market place by the advent of laser-electronic printing for pre-printed form letters or circular letters because of the versatility of this printing system" (col. 1, lines 9-21)

Yet Lubotta is deficient with respect to this invention in that:

1) it requires co-operation with a folding and gluing machine. (col. 4 lines 60-67)

2) it can only be embodied for friction printers.

3) the glue 63 (col. 4, lines23-25) of the return envelope portion would have to be a dry adhesive with especial properties to stand the high temperatures involved in laser printing. If the glue is latex, or pressure sensitive adhesive the mailer simply will not travel through the printer, and may even damage some of the printer's parts.

4) then, glue 63 requires to be moistened by addressee to seal the return portion (envelope 59).

5) this return portion is an envelope, which would need to contain a letter, document, check, etc, to have a useful purpose, in clear differentiation with respect to the present invention's "second mailer 244" of 13th and 14th embodiment examples ("two way self sealing mailer"). See **Fig's 24A-24N** and **25A-25O** of this application. "Second mailer 244 is just another self sealing form, that can wrap itself and that does not require an envelope.

6) Continuous forms are not possible.

b) U.S. patent 4,784,317 to Chen et al discloses a 'one piece mailer for laser printer' for having a message and the addressing information printed on one side by the laser printer. (col. 1, lines 9-18), This patent relies on some special properties of the adhesive used. (Col. 3, lines 21-31); Chen is deficient with respect to this invention in that:

1) it requires the moistening of dry adhesive (col. 1, lines 41-47)

2) alternatively, it requires a strip of release coated protective paper (col. 1, lines 55-60)

3) it can only be embodied for friction printers.

4) in the first embodiment, the production of windows 18 and 20 (col. 2, lines 68-69) is indispensable to show the addressing information.

5) in the second embodiment (Figs. 3-7) a return envelope is produced in the bottom portion, and its adhesive 48 needs to be in contact with water for its activation (col.3, lines 52-55)

6) the message section then needs to be detached, folded and inserted into the envelope, in clear distinction with respect to the self sealing form of this application that wraps itself, and requires no envelope.

7) no continuous forms are possible.

c) U.S. patent 4,898,323 to Chen et al, which is a Continuation-In-Part of preceding patent (4,784,317) discloses a mailer for laser printer, which includes embodiments of preceding patent and adds an embodiment described as 'a unitary two-sheet mailer' (col. 5, lines 63-64.)

This patent is deficient with respect to this invention in that:

1) it has all the disadvantages of preceding patent (4,784,317)

2) it further requires another sheet of substrate.

3) it further requires a strip band of adhesive 94 to keep both sheets connected (col. 5, lines 5-8)

4) it further requires a particular and precise folding pattern of the top sheet, so addressing information is not covered (col. 5, lines 27-30; col. 5, lines 34-38) which is impractical and inconvenient.

d) U.S. patent application 2002/0038817, entitled "Stationery" by Black, with a filing date posterior to this application's priority date teaches the production of a 'stationery form, that can be postally handled without requiring a separate envelope' (page 1, para. 0002) This stationery form relies on a two stage sealing, defined by the intensity of the pressure exerted thereto. (i.e. a first light pressure action produces a temporary sealing, and a second stronger pressure action produces a permanent sealing. (page 3, para. 0040)

This patent application is deficient with respect to this invention in that:

1) it requires the production of windows to show the addressing information.

2) it requires a contact adhesive (i.e two facing coatings) and the adhesive proposed is latex based (page 3, para. 0040, 6 last lines), which is known to melt at the high temperatures used by friction printers.

3) it requires a high pressure for the permanent sealing phase, and as admitted in the patent application, this task typically would require a machine.

4) a built-in reply portion is not possible.

e) "Aerogramme". (See copies of specimen, supplied with attached Invention Disclosure Statement) Aerogramme is a mailer available at U.S. Post Offices, consisting of a body to be divided in three panels, and three flaps surrounding the first panel. Each flap has a layer of dry adhesive.

This product is deficient with respect to this invention in that:

1) it can not be fed through a printer.

2) as a result, it can not be electronically produced and recorded.

3) it requires entering the addressing information as an additional step.

4) it requires moistening of the dry adhesive layers.

5) a built-in reply portion is not possible

6) It can not be produced as' continuous forms'

f) "Bright Eyes" (See copies of specimen, see copy of packaging supplied with attached Invention Disclosure Statement) Bright Eyes is a version of "Aerogramme", discussed above, apparently tailored for more personal messages and greetings, as it is made of a substantially thicker material (card stock) and has colorful illustrations imprinted on both sides.
The disadvantages of this product are the same as "Aerogramme's", discussed above.

g) "Self-Seal mailer", product # 8325, by Avery Dennison Corp., bearing a patent pending notice on its packaging and a copyright notice dated 1997.
(See copies of specimen, packaging, leaflet and print-out of online listing, submitted with attached Invention Disclosure Statement) This 'Self-Seal Mailer' consists of a three panel body, having an 'adhesive strip' on first panel. The adhesive strip is covered by a removable liner (cover). The mailer is made of a 'card stock' material.
This product is deficient with respect to this invention in that:

1) it is only for inkjet printers.

2) it can not be used with copying equipment.

3) in order to have addressing information, both sides of mailer must be printed, or a label attached, or address entered manually.

4) the 'cover' protecting the adhesive strip must be produced and mounted by manufacturer.

5) user must remove this 'cover' to seal the mailer, and then dispose of it (the cover)

6) the mailer does not provide any privacy to the message as its sides are open at all times; only a minimal effort is necessary to see its contents without **having to unseal it.**

7) no embodiment for traction continuous forms (mailers) is possible.

8) no built-in reply portion is possible.

As these examples prove, a need for a practical self sealing form has existed for a long time, and it has been felt by the industry. It just wasn't invented until now. Accordingly,

-rejection of claims 7, 11 and 12 under §102(b) on Schieman should be traversed;

-rejection of claims 7-9, 11, 12, 14 and 15 under §103(a) on Fisher and Schieman should be traversed;

-rejection of amended claims 7-9, 11, 12, 14 and 15 under §103(a) on Schieman and Tissot should be traversed.

II. There are exponents in this very crowded art, or earlier references that are closer in structure to the claimed invention than those references cited in Office Action rejections, yet fail to anticipate the unexpected results and advantages of the claimed invention.

For instance, the "Self-Seal Mailer" (Product # 8325) by Avery Dennison Corp., mentioned above. This product has a body (body in the claims) and an adhesive strip separated from the body by a perforated line (for the purpose of opening the mailer by recipient), which produces a section structurally similar to a flap. (at least one flap, in the claims); the adhesive is applied on the adhesive strip (flap, in the claims), the adhesive inhibitor is provided in the form of a removable 'cover'. The adhesive inhibitor does not need to be 'looked for' and borrowed from any other reference to be combined. The adhesive inhibitor is in the product. **(See ATTACHMENT 9)**

This product is structurally closer to the application than any of the cited references, and does not anticipate the following advantages and unexpected results that my invention produces:

1) the self sealing form of this application is suitable for inkjet, laser, thermographic, web, lithographic, tractor fed, and friction fed printers.

2) the self sealing form of the present invention can be used with copying equipment.

3) only one computer command is necessary to print both, the message and the addressing information.

4) only one trip of the self sealing form across a printer is necessary to obtain the message and the addressing information.

5) the self sealing form can be fed through copying equipment.

6) the self sealing form of this application eliminates the need to produce and mount a separate release liner by manufacturer.

7) the self sealing form of this application eliminates the need to remove and discard the separate release liner by user.

8) the self sealing form of this application provides absolute privacy to the message.

9) the self sealing form of the present invention permits the creation of a reply portion.

10) the reply portion possible by this invention is another self sealing form that does not require an envelope.

Accordingly,

-rejection of claims 7, 11 and 12 under §102(b) on Schieman;

-rejection of claims 7-9, 11, 12, 14 and 15 under §103(a) on Fisher and Schieman;

-and rejection of amended claims 7-9, 11, 12, 14 and 15 under §103(a) on Schieman and Tissot should be traversed, as this prior art exponent is structurally closer to this invention than any cited reference, yet fails to anticipate the unexpected results and advantages of my invention.

Furthermore, if structure rather than function is what defines an apparatus claim, as asserted by examiner, applicant submits the following reference as a product that is structurally closer, yet has a completely different function than the present application, and hence fails to anticipate its unexpected results and advantages.

US Patent 5,087,238 to Olson, entitled "Forms Carrier For Laser Printer", consists of a 'rectangular singular sheet of flexible material', having a fold line 12, dividing the sheet into a lower portion 16 (the body in this application) and an upper portion 18 (the flap in this application), (Col 4, lines 27-30) pressure sensitive acrylic adhesive 34 (adhesive in this application). (Col 4, lines 51-64)

So, all the basic elements of the claims are present in Olson's invention.

Lack of folding lines in the "lower portion 18" (the body in this application) does not structurally distance this reference from my invention, as the folding lines, while may result convenient, are not indispensable in the invention, and are not necessary for the operability of the product, given the flexibility of paper (or any flexible sheet material used)

The adhesive inhibitor does not need to be 'looked for' and borrowed from any other reference to be combined. The adhesive inhibitor (protective strip 36) is in the product. (See Olson's Fig.1, col. 4, lines 58-59)

This product is structurally closer to the application than any cited references, and does not anticipate the advantages and unexpected results that the present invention produces, as listed in the discussion of "Self-Seal Mailer" above.

Accordingly,

-rejection of claims 7, 11 and 12 under §102(b) on Schieman should be traversed;

-rejection of claims 7-9, 11, 12, 14 and 15 under §103(a) on Fisher and Schieman should be traversed;

-rejection of amended claims 7-9, 11, 12, 14 and 15 under §103(a) on Schieman and Tissot should be traversed.

III. If only for the sake of discussion Schieman's envelope is considered analogous to present "Self Sealing Form" then claimed invention clearly produces synergetic results with respect to Schieman by itself or combined with Fisher or combined with Tissot

Related to the §102 rejections of claims 7, 11 and 12 on Schieman, the claimed invention permits a private message section, integrally built in one single piece with the rest of the invention, which in itself constitutes overwhelming evidence of nonobviousness. Or stated in other terms, the present invention unexpectedly produces the results of two products, namely a message and a wrapper, in a synergetic manner.

Accordingly, ven if Schieman was an appropriate reference, §102(b) rejection of claims 7, 11 and 12 based on it, should be traversed.

Now regarding the §103(a) rejections of claims 7-9, 11, 12, 14 and 15 on Schieman combined with Fisher and claims 1, 7, 11 and 17 submitted on 03/26/02 on Tissot, -also hypothetically considering such combinations legitimate- the claimed invention provides synergetic effects as it goes much further than the mere combination of the references, since the expected results of the mere combination of a letter and an envelope is a letter that does not require an envelope.

The following are unexpected results beyond a mere combination of a letter and an envelope:

1) while the combination of two products suggests a larger amount of materials used, the amount of materials required is substantially less than the mere combination (See Attachment 4), which translates in substantial costs reduction.

2) as a result, the weight of the product is lighter than the mere combination, which translates in postage savings, especially significant in massive mailings.

3) both, the message and addressing information are entered and produced at once, with one single computer command and one single trip of the message across the printer minimizing printing time, and wear of equipment.

In conclusion, even if references are considered analogous among them, and then their combination analogous to the present "Self Sealing Form" then, claimed invention clearly produces synergetic results with respect to Schieman combined with Fisher or combined with Tissot, and accordingly:

-rejection of claims 7-9, 11, 12, 14 and 15 under §103(a) on Fisher and Schieman should be traversed;

-rejection of amended claims 1, 7, 11 and 17 submitted on 03/26/02 under §103(a) on Schieman and Tissot should be traversed.

IV. Tissot is inoperative, and hence invalid as a reference.

Applicant conducted a test, to examine the enablement of Tissot's teachings. A disassembled #10 envelope having a coating of dry adhesive on a flap was used to simulate Tissot's rectangle and adhesive (gum) areas. Water was used as the dampening agent. A manual roller was used in lieu of the copying press. A dry sheet (acting as the strips d^1, d^2, and d^3) was placed between the dampened sheet (acting as the original being copied) and the adhesive of the envelope, and subjected to the roller's pressure (which is of a substantially lesser strength than the press in a letter-copying process and whose action is of a substantially shorter duration than the press, as its action is applied only as the roller moves, i.e. fractions of a second, as opposed to a constant and uniform higher pressure exerted for at least the time that takes to press —screw— the two items together plus the time it takes to release —unscrew— the press wheel, plus the time it takes to remove the two subsequently connected sheets by the effect of the ink, and dampening agent) See: http://aic.stanford.edu/conspec/bpg/annual/v17/bp17-05.html

Also, see excerpt of this site **(ATTACHMENT 7)**

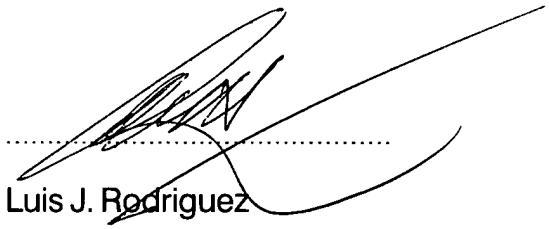
The results of the test, as expected, were that given the permeability of paper, Tissot's strips d^1, d^2, and d^3 instead of protecting the adhesive (gum) area, adhere to it, and which will be exacerbated by the high pressure of the copying press, applied for the minimum time physically necessary as described above, aggravating thereby the problem it intends to solve.

Since permeability of the paper is necessary for the letter-copying process, and the use of the protective strips d^1, d^2, and d^3 is the only inventive feature of Tissot's patent. this defect is fatal to its usefulness. (This inoperativeness is established without even considering the fact that Tissot's strips are narrower than the adhesive areas they are intended to protect)

Consequently, this patent is inoperative, and as such, should be disqualified as a reference, and rejection of amended claims 1, 7, 11 and 17 proposed on 03/26/02, on Schieman and Tissot should be traversed.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of any application, any patent issuing thereon, or any patent to which this verified statement is directed.

Signed under the penalty of perjury on May 20, 2002



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